

# Sutherland Reservoir

## 2011 Fall Survey Summary



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Sutherland Reservoir is the first canal reservoir downstream from Lake McConaughy. This reservoir is utilized for the cooling of Nebraska Public Power District's (NPPD) Gerald Gentleman Station. This results in warmer water temperatures earlier in the spring and later into the fall than other reservoirs. Sutherland Reservoir offers unique fishing opportunities as a result of its functionality. Notice these aspects and special regulations at [http://www.nppd.com/assets/public\\_recreation.pdf](http://www.nppd.com/assets/public_recreation.pdf).

Every fall the fishery at Sutherland Reservoir is sampled using experimental gill nets, a method commonly used to sample fish found primarily in open water, such as walleye, white bass, channel catfish and hybrid striped bass. These nets are made of clear monofilament mesh strung between a weighted line and a floating line. This mesh ranges in size from  $\frac{3}{4}$  of an inch to 3 inches and the nets are typically set perpendicular to the shoreline in 6 to 12 feet of depth during late afternoon with an orange floating buoy on the ends to deter boats from being entangled and for ease of retrieval. Gill nets create an invisible wall in the water column that fish cannot sense so they are entangled by their gills as they attempt to move through this mesh.

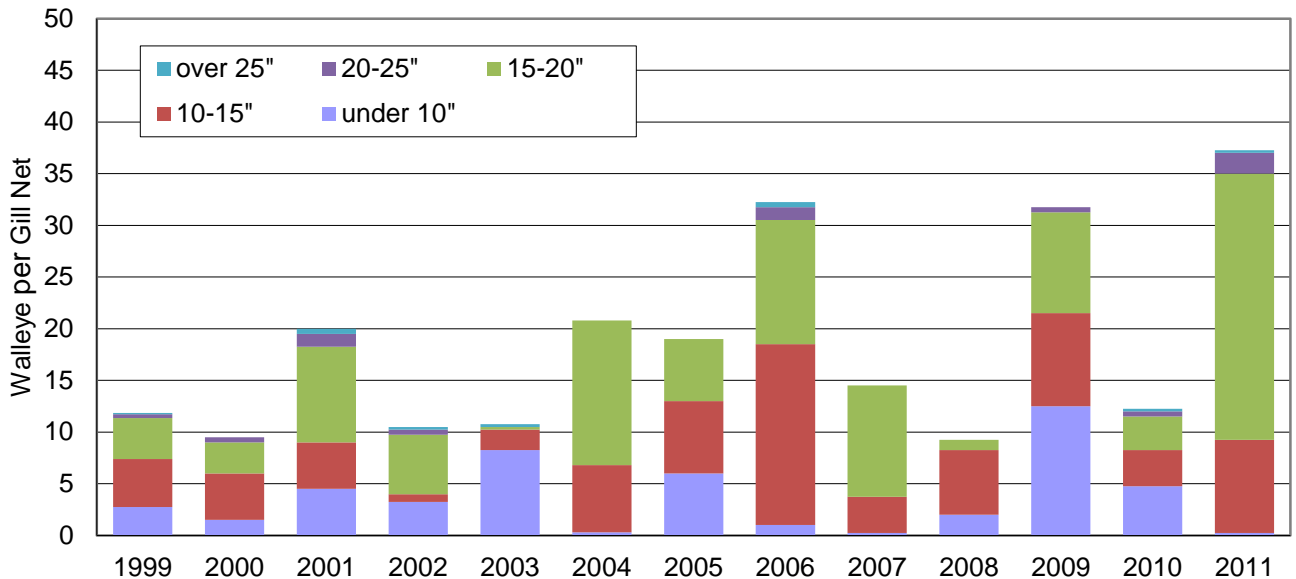
Data collected from these surveys allow biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations. This information also assists Game and Parks staff in guiding anglers to waterbodies that have the desired populations for fishing.

The following text and graphs are the result of the 2011 gill netting survey at Sutherland Reservoir. Graphs represent number of each species captured per gill net by length group. For comparative purposes it also shows results from previous years.

Notice fishing regulation changes in the 2011-2012 Fishing Guide at this link <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf> or pick up a print copy at your local vendor or NGPC office.

# Standard Population Survey Results

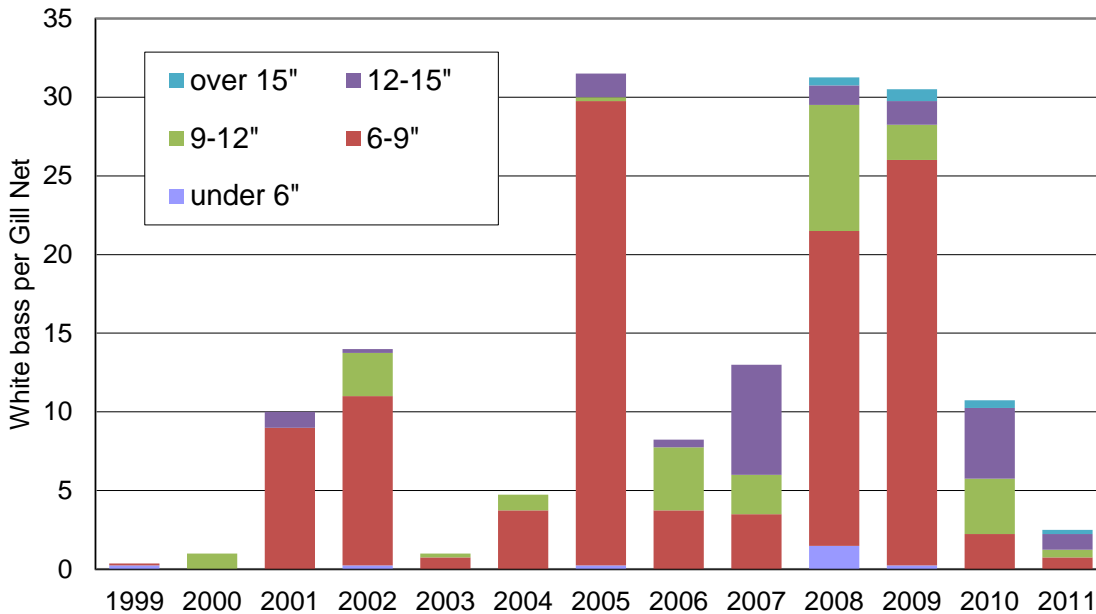
## Walleye



Walleye were sampled in larger quantity than in the past 13 years and 75% of these sampled were over the 15" legal length limit. The mean length was 16" and several individuals over 20" were measured. Walleye are stocked annually into Sutherland. In 2011, 79,988 fingerlings were stocked and a similar stocking will be requested for 2012. Although these stockings occur on an annual basis, migration of walleye from upstream may have contributed to the 2011 survey results.

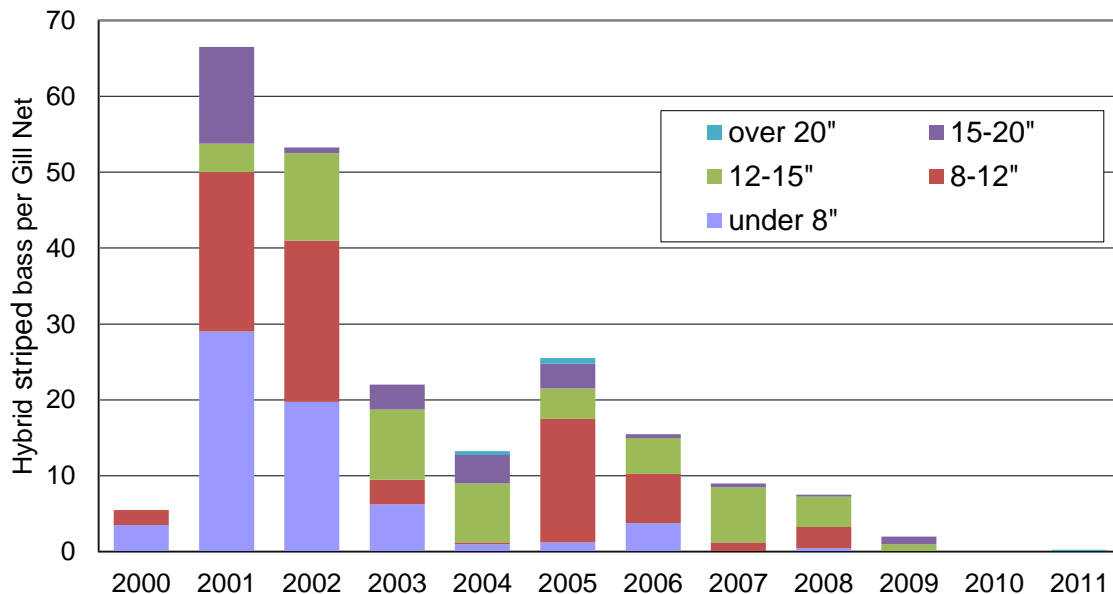


# White bass



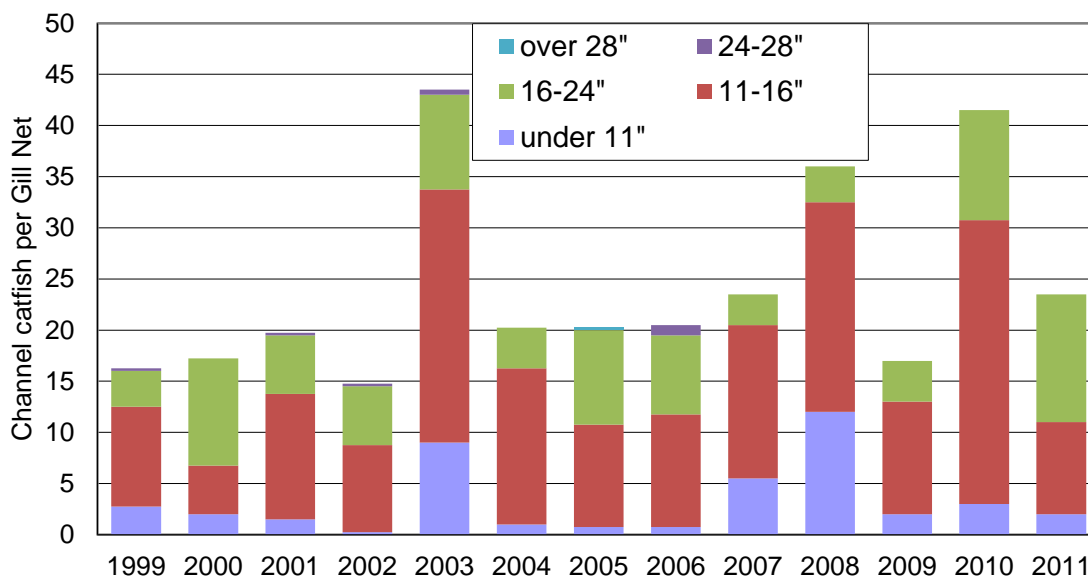
White bass catch rate was low with approximately three sampled per gill net with a mean length of 11.2". Despite the low catch rate observed in 2011, the 6-9" individuals observed in the 2009 sample may still be in the system and available to catch in 2012. Natural recruitment supports the white bass fishery.

# Hybrid striped bass



Only one hybrid striped bass was sampled in 2011. This agrees with a slowly declining trend of gill net catch rates observed over the last six years. A low density population consisting of large individuals (> 20") is desired. A hybrid striped bass stocking will be requested for 2012.

# Channel catfish



Channel catfish were sampled in above average quantity in 2011 with approximately 23 sampled per gill net with an average length of 16". Channel catfish are not stocked into Sutherland Reservoir as natural recruitment supports the fishery.

If you have questions or concerns about the fishery of Sutherland Reservoir please contact

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OR

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## PLEASE HELP

### Prevent the Spread of Aquatic Invasive Plants & Animals



*Eurasian Watermilfoil*



*Zebra Mussel*

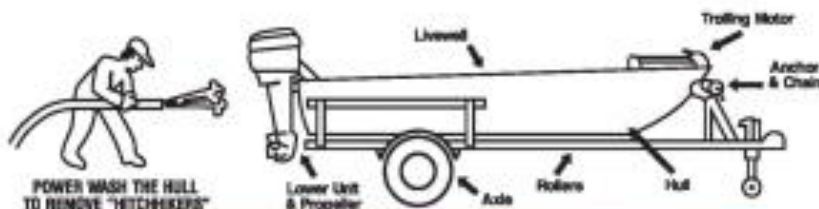


*Purple Loosestrife*

### BEFORE launching... and BEFORE leaving:

- Remove all aquatic plant fragments and animals (away from the water body)
- Disinfect & Drain the water in the transom, bilge and livewell
- Clean off all equipment (rods, reels, water skis, scuba gear, hunting gear, etc)
- Thoroughly clean boat & equipment with high pressure or hot water OR, if possible, dry equipment for 5 days before entering new waters
- Dispose of unwanted bait in trash

### WHERE TO LOOK FOR "HITCHHIKERS"



**PROTECT YOUR LAKES and RIVERS for the FUTURE**

For More Information Contact:

Nebraska Invasive Species Project  
<http://nicr.unl.edu/invasives>

Nebraska Game and Parks Commission  
(903) 763-2940

